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LAW OFFICES OF DALE K. GALIPO

Dale K. Galipo (SBN 144074)

dalekgalipo@yahoo.com

Cooper Alison-Mayne (SBN 343169)

cmayne@galipolaw.com

21800 Burbank Boulevard, Suite 310

Woodland Hills, CA 91367

Phone: (818) 347-3333

Attorneys for Plaintiff Dorothey Heimbach

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF CALIFORNIA

DOROTHEY HEIMBACH,

Plaintiff,

VS.

STANISLAUS COUNTY, JUSTIN CAMARA, and ZA XIONG,

Defendants.

2:23-cv-01887-DJC-CSK

Assigned to:

District Judge Daniel J. Calabretta

DECLARATION OF COOPER ALISON-MAYNE IN SUPPORT OF PLAINTIFF'S MOTION IN LIMINE #3 TO EXCLUDE ALL OPINIONS OF DEFENSE EXPERT IAIN MCINTYRE

FPTC Date: December 18, 2025

Time: 1:30 PM Location: Courtroom 7 I, Cooper Alison-Mayne, declare as follows:

I am an attorney duly licensed to practice law in the State of California, and the Eastern District of California. I make this declaration in relation to the parties joint report filed concurrently. I have personal knowledge of the facts contained herein and could testify competently thereto if called.

Attached hereto as "Exhibit A" is a true and correct copy of the January 1, 2025, Rule 26 Report of Defendants expert Iain M. McIntyre, Ph.D.

I declare under penalty of perjury under the laws of the State of California and the United States of America that the foregoing is true and correct. Executed on December 11, 2025, in Los Angeles, California.

LAW OFFICES OF DALE K. GALIPO

Dated: By: <u>/S/ Cooper Alison-Mayne</u>

Dale K. Galipo

Cooper Alison-Mayne Attorneys for Plaintiff

EXHIBIT A



IAIN M. McINTYRE, Ph.D.

FORENSIC TOXICOLOGIST, CONSULTANT, AND EXPERT WITNESS

CURRICULUM VITAE

January 1, 2025



ADDRESS / CONTACT DETAILS

Private Consulting: 11168 Paseo Montanoso

San Diego, CA 92127

U.S.A.

Telephone: (858) 248-2342

E-mail: imcintyre.tox@gmail.com

Web: https://iainmmcintyre.wixsite.com/toxicology

Former Position: Forensic Toxicology Laboratory Manager / Director

and Chief Toxicologist

Department of the Medical Examiner

County of San Diego

5570 Overland Ave., Suite 101

San Diego, CA 92123

U.S.A.

PLACE OF BIRTH

Footscray, Victoria, Australia

EDUCATION

Essendon Grammar School, Essendon, VIC. Australia (1969-1974)

University of Melbourne, Melbourne, VIC. Australia (1975-1983)

TERTIARY ACADEMIC QUALIFICATIONS

Ph.D. (1983) Faculty of Medicine

University of Melbourne, Australia

Thesis Title:

"Biochemical and Endocrinological Studies in Psychiatric

Disorders".

(Supervisors: Drs. G.D. Burrows, T.R. Norman)

M.S. (1980) Faculty of Science

University of Melbourne, Australia

Thesis Title:

"Studies of Nomifensine in Man".

B.S. (Honors) (1979) Faculty of Science

University of Melbourne, Australia

1st Class Honors

Subject:

"Evaluation and Application of a Radioimmunoassay for

Nomifensine".

B.S. (1977) Faculty of Science

University of Melbourne, Australia

Major subjects:

Organic, Physical and Inorganic Chemistry

OTHER TERTIARY COURSES

1980s RMIT University

Phlebotomy Course

CURRENT POSITION

2003-Current Forensic Toxicologist, Consultant, and Expert Witness

11168 Paseo Montanoso San Diego, CA 92127 U.S.A. Telephone: (858) 248-2342 E-mail: imcintyre.tox@gmail.com

Web: http://iainmmcintyre.wix.com/toxicology

PREVIOUS PROFESSIONAL EXPERIENCE

2001-2020 Forensic Toxicology Laboratory Manager / Director

and Chief Toxicologist

Department of the Medical Examiner

County of San Diego

5570 Overland Ave., Suite 101 San Diego, CA 92123 U.S.A.

2014-2022 Voluntary Clinical Professor

Department of Pathology

University of California, San Diego

Health Sciences 9500 Gilman Drive, La Jolla, CA 92093 U.S.A.

2008-2012 Adjunct Assistant Professor

Graduate School of Public Health, College of Health and Human Services

San Diego State University San Diego, CA 92182 U.S.A.

2003- 2005 Adjunct Professor - Forensic Toxicology

School of Business & Information Management Department of Organizational Management &

Administration National University

La Jolla, CA 92037-1011 U.S.A.

1996- 2001 Manager and Chief Scientist (Toxicology)

Victorian Institute of Forensic Medicine

57-83 Kavanagh Street Southbank Vic Australia Telephone (61 3) 9 684 4444

1997- 2001 Honorary Senior Lecturer

Department of Forensic Medicine

Monash University 57-83 Kavanagh Street Southbank Vic Australia

1990- 2001	Honorary Senior Research Fellow Department of Psychology La Trobe University Bundoora Vic Australia
1989- 2001	Member Brain Behaviour Research Institute La Trobe University Bundoora Vic Australia
1994-1997	Honorary Senior Research Fellow Department of Forensic Medicine Monash University 57-83 Kavanagh Street
1990-1996	Chief Scientist (Toxicology) Victorian Institute of Forensic Pathology (Medicine) 57-83 Kavanagh Street Southbank Vic Australia
1990-1991	Honorary Research Officer Department of Psychiatry The Amalgamated Melbourne & Essendon Hospitals Melbourne Vic Australia
1989-1990	Teaching, Diploma of Psychological Medicine (DPM) University of Melbourne
1985-1990	Research Fellow Department of Psychiatry University of Melbourne and Psychoendocrine Research Unit Division of Psychological Medicine Austin Hospital Heidelberg Vic Australia
1985	Visiting Research Fellow Department of Biochemistry University of Surrey Guildford Surrey England (Sponsored by Dr Josephine Arendt and the Ciba Foundation)
1982-1985	Teaching, Neuroendocrinology Lafayette Clinic/Wayne State University Psychiatric Residency Program and Master's Program

1983-1985 Assistant Professor

Department of Psychiatry

Wayne State University School of Medicine

and Director

Psychoendocrine Research Unit

Lafayette Clinic Detroit MI USA

1982-1983 Lecturer

Department of Psychiatry

Wayne State University School of Medicine

and

Assistant Laboratory Administrator

Division of Pharmacology

Lafayette Clinic Detroit MI USA

1978-1979 Assistant Research Officer

Department of Psychiatry University of Melbourne Melbourne VIC Australia

SCHOLARSHIPS / AWARDS / FELLOWSHIPS

1970 Australian Government Scholarship

1979-1982 Postgraduate Research Award, Australian Government

1981 ASCEP Bursary

1982-1983 Postdoctoral Research Fellow

Lafayette Clinic

and

Department of Psychiatry Wayne State University

School of Medicine (Sponsored by Dr. Samuel Gershon)

1984 Ciba Foundation Bursary (London, UK)

1985 Annual Research Award for Psychoneuroendocrinology

from The Australian Society for Psychiatric Research

(sponsored by Organon)

1985-1987 University of Melbourne Research Fellowship

EDITORIAL BOARD APPOINTMENTS: INTERNATIONAL JOURNALS

- 1. Journal of Forensic Science: Research & Development (Executive Editor); OMICS Publishing Group: An Open Access Publisher (2010-2013)
- 2. Journal of Analytical Toxicology (1994-2004)
- 3. International Biodeterioration & Biodegradation (1998-2012)

CONSULTANT / REFEREE / SCIENTIFIC ADVISORY BOARD MEMBER: INTERNATIONAL JOURNALS

- 1. Journal of Analytical Toxicology (1993-current)
- 2. Forensic Science International (2003-current)
- 3. Journal of Forensic and Legal Medicine (2011-current)
- 4. Journal of Forensic Sciences (2014-current)
- 5. World Journal of Emergency Medicine (2014-current)
- 6. European Journal of Forensic Sciences (2015-current)
- 7. Toxicology Research (Royal Society of Chemistry) (2015-current)
- 8. *Stress and Health (2003-2007)*
- 9. Journal of Chromatography B (2007)
- 10. Journal of Chromatography (Biomedical Applications) (1993-1999)
- 11. Stress Medicine (1994-1996)
- 12. CNS Drugs (1994-1995)
- 13. Biological Psychiatry (1986-1993)
- 14. Psychiatry Research (1993-1995)
- 15. Psychoneuroendocrinology (1986-1990)
- 16. Australian and New Zealand Journal of Psychiatry (1990)

PROFESSIONAL SOCIETIES: MEMBERSHIPS

- 1. The International Association of Forensic Toxicologists (TIAFT) (1990 current)
- 2. Society of Forensic Toxicologists (SOFT) (1993 current)
- 3. California Association of Toxicologists (CAT) (2002 current)
- 4. American Academy of Forensic Sciences (AAFS) (2016 current)
- 5. Midwest Association for Toxicology and Therapeutic Drug Monitoring (MATT) (2015 -2021)
- 6. The Australian Society of Clinical and Experimental Pharmacologists (1978-1993)
- 7. International Brain Research Organization (1989-1993)
- 8. The Australian Society for Medical Research (1986-1991)
- 9. International Society of Psychoneuroendocrinology (ISPNE) (1985-1990)
- 10. The Australian Society of Biological Psychiatry (1986-1990)
- 11. The Australian Society of Psychiatry Research (ASPR) (1985-1990)
- 12. Society for Light Treatment and Biological Rhythms (SLTBR) (1989-1990)

ASSESSOR FOR GRANTING BODIES

National Health and Medical Research Council of Australia (NH &MRC) (1987-2001)

LABORATORY ASSESSOR / INSPECTOR (NATIONAL FORENSIC ACCREDITATION BODY)

Technical assessor for NATA (National Association of Testing Authorities, Australia). Forensic Science Accreditation Advisory Committee. (2000-2001)

-Tasmanian Forensic Science Institute, Hobart, Tasmania, Australia, 2000.

LABORATORY ASSESSOR / INSPECTOR (AMERICAN BOARD OF FORENSIC TOXICOLOGY)

Technical Laboratory assessor for ABFT (American Board of Forensic Toxicology). (2006-Current)

- -New York Medical Examiner, New York, NY, December 2006.
- -NMS Labs, Willow Grove, PA, March 2007.
- -Oklahoma Medical Examiner, Oklahoma City, O., September 2007.
- -Washington State Patrol, Seattle, WA, October 2007.
- -Erie County Medical Examiner, Buffalo, NY, May 2008.
- -New York Medical Examiner, New York, NY, May 2009.
- -Washington State Patrol, Seattle, WA, June 2009.
- -New Mexico Office of the Medical Examiner, Albuquerque, NM, November 2009.
- -Albany Medical Center, Albany, NY, September 2010.
- -Westchester County Department of Laboratories and Research, NY, May 2011.
- -Oklahoma Medical Examiner, Oklahoma City, OK, January 2012.
- -Suffolk County Medical Examiner, Hauppauge, NY, May 2012.
- -District of Columbia Office of the Chief Medical Examiner, D.C., January 2014.
- -Cuyahoga County Medical Examiner, Cleveland, OH, January 2015.
- -Federal Bureau of Investigation (FBI), Quantico, VA, June 2015.
- -Erie County Medical Examiner, Buffalo, NY, April 2016.
- -Redwood Toxicology Laboratory-Forensic Division, Santa Rosa, CA, June 2016.
- -City and County of San Francisco Office of the Chief Medical Examiner, San Francisco, CA, 2017.
- -Forensic Laboratory Division, CA, May 2017.
- -State of Delaware–Department of Safety and Homeland Security–Division of Forensic Science, May 2018.
- -City and County of San Francisco Office of the Chief Medical Examiner, San Francisco, CA, January 2019.

COMMITTES and COMMUNITY PROGRAMS

County of San Diego Local Assistance Center (LAC)

Assistant Manager: 2011-2019

Scientific Working Group for Forensic Toxicology (SWGTOX)

Committee Member: 2013 - 2014

National Institute of Justice: Controlled Substances and Toxicology Technical Working

Group (TWG)

US Department of Justice : December 2014

National Institute of Justice: Controlled Substances and Toxicology Technical Working

Group (TWG)

US Department of Justice: September 2015

POSTGRADUATE STUDENT SUPERVISION

1987	B.Sc.(Honors)	Daniela Sartor	The University of Melbourne (Dept. of Psychiatry) Co-supervision with Dr. T.R. Norman
1991	B.Sc.(Honors)	Daniela Cerasuolo	Monash University (Dept. of Pharmacology and Toxicology)
1992	B.Sc.(Honors)	Fiona Couper	Co-supervision with Dr. O.H. Drummer Monash University (Dept. of Pharmacology and Toxicology) Co-supervision with Dr. O.H. Drummer
1992-1	999 M.Sc.	Kerryn Crump	Monash University (Dept. of Forensic Medicine)
1997	B.Sc.(Honors)	Paull Jaffe	Co-supervision with Dr. O.H. Drummer) Monash University (Dept. of Pharmacology and Toxicology)
1997	B.Sc.(Honors)	Helen Batziris	Co-supervision with A/Prof O.H. Drummer University of Melbourne (Dept. of Pharmacology)
1998	B.Sc.(Honors)	Mary Baratto	Co-supervision with A/Prof O.H. Drummer Monash University (Dept. of Pharmacology and Toxicology)
1999-2	2002 Ph.D.	Kabrena Goeringer	Monash University (Dept. of Forensic Medicine) Co-supervision with A/Prof O.H. Drummer
2010-2	012 M.Sc.	Christina Meyer Escott	Cardiff University, Wales (U.K.) (School of Medicine, Medical Toxicology)
2015	M.F.S.	Jose E. Valdez, Jr.	Co-supervision with Prof P.A. Routledge National University, San Diego, CA.U.S.A. Co-supervision with Dr. Ismail Sebetan

PUBLIC APPEARANCES (as an expert in forensic toxicology)

Participation in Documentary Movie

"Soaked in Bleach" A documentary film (released June 2015) explores the death of Kurt Cobain and its aftermath, examines the competing opinions and theories surrounding his death (suicide or foul play/murder), as well as the various people tied to those theories. Suburban Hitchhiker: Richard Middleton & Donnie Eichar, prods.; Benjamin Statler, dir.;

Michael Sanford (in association with Heidi Levitt Casting), & Heidi Levitt, casting dirs.; David Lowe, casting assoc.

Participation in Documentary/Crime/Drama

"Accident, Suicide or Murder" Investigated by Paul Holes: What happened to Morgan Ingram? Oxygen Network. Premier: May 18, 2019.

Consultant

The DNA of Murder with Paul Holes Oxygen Network. Premier: Spring 2020.

PUBLICATIONS

- Vohra, J., Burrows, G.D., McIntyre, I.M. and Davies, D.M. "Cardiovascular Effects of Nomifensine" **Lancet** 11 902-903, 1978.
- 2. Burrows, G.D. Norman, T.R., McIntyre, I.M., Maguire, K.P. and Wurm, J.M.E. "Cardiac Effects of Some Newer Antidepressants" **Drug Newsletter** Baltimore, MD, 1979.
- 3. McIntyre, I.M., Burrows, G.D., Norman, T.R. and Scoggins, B.A. "Radioimmunoassay of A New Antidepressant Nomifensine" Clinical and Experimental Pharmacology and Physiology <u>6</u> 703, 1979.
- 4. Dumovic, P., Burrows, G.D., Vohra, J. and McIntyre, I.M. "Nomifensine A New Antidepressant" Clinical and Experimental Pharmacology and Physiology <u>6</u> 706, 1979.
- 5. McIntyre, I.M., Norman, T.R., Burrows, G.D., Dumovic, P. and Vohra, J. "Plasma Nomifensine Concentration: Cardiological Effects and Clinical Response" **International Pharmacopsychiatry** 15 325-333, 1980.
- 6. McIntyre, I.M., Norman, T.R. and Burrows, G.D. "In Vitro Stability of Nomifensine in Plasma Concentrations" **Clinical Chemistry** 27 203-204, 1981.
- 7. McIntyre, I.M., Norman, T.R., Burrows, G.D., Davies, D. and Maguire, K.P. "Dexamethasone Suppression Test Poor Response to Antidepressants" **British Medical Journal** 283 1609-1610, 1981.
- 8. McIntyre, I.M., Norman, T.R., Burrows, G.D. and Maguire, K.P. "Determination of Nomifensine Plasma Concentrations: A Comparison of Radioimmunoassay and Gas Chromatography" **British Journal of Clinical Pharmacology** 12 691-694, 1981.
- 9. McIntyre, I.M., Norman, T.R., Burrows, G.D. and Maguire, K.P. "Pharmacokinetics of Nomifensine After a Single Oral Dose" **British Journal of Clinical Pharmacology** 13 740, 1982.
- 10. Maguire, K.P., Norman, T.R., McIntyre, I.M., Burrows, G.D. and Davies, D.M. "Blood and Plasma Concentrations of Dothiepin and its Major Metabolites and Clinical Response" **Journal of Affective Disorders** 4 41-48, 1982.
- 11. Norman, T.R., McIntyre, I.M., Burrows, G.D. and Judd, F. "The Dexamethasone Suppression Test in an Inpatient Psychiatric Population" **Pharmabulletin Health Commission of Victoria** 61 31-34, 1982.
- 12. Maguire, K.P., Norman, T.R., McIntyre, I.M. and Burrows, G.D. "Clinical Pharmacokinetics of Dothiepin: Single Dose Kinetics in Patients and Prediction of Steady-State Concentrations of Dothiepin" Clinical Pharmacokinetics <u>8</u> 179-185, 1983.
- 13. Maguire, K., McIntyre, I.M., Norman, T.R. and Burrows, G.D. "The Pharmacokinetics of Mianserin in Elderly Depressed Patients" **Psychiatry Research** <u>8</u> 281-287, 1983.

- 14. Norman, T.R., Burrows, G.D., Marriott, P.F., McIntyre, I.M., Davies, B.M. and Moore, R.G. "Zimelidine: A Placebo Controlled Trial in Depression" **Psychiatry Research** 8 95-103, 1983.
- 15. Norman, T.R., Burrows, G.D., Maguire, K.P., McIntyre, I.M. and Scoggins, B.A. "Maprotiline in Affective Illness; Plasma Concentrations and Clinical Response" **Journal of Affective Disorders** 5 147-154, 1983.
- McIntyre, I.M., Kuhn, C., Demetriou, S., Ruffing, D., Fucek, F. and Stanley, M.
 "Modulating Role of Lithium on Dopamine Turnover, Prolactin Release and Behavioural Supersensitivity Following Haloperidol and Reserpine" Psychopharmacology <u>81</u> 150-154, 1983.
- 17. Oxenkrug, G.F., Pomara, N., McIntyre, I.M., Stanley, M. and Gershon, S. "Aging and Cortisol Resistance to Suppression by Dexamethasone: A Positive Correlation" **Psychiatry Research** 10 125-130, 1983.
- 18. McIntyre, I.M. and Stanley, M. "Postmortem and Regional Changes in Serotonin, 5-Hydroxyindoleacetic Acid and Tryptophan in Brain" **Journal of Neurochemistry** 42 1588-1592, 1984.
- 19. Oxenkrug, G.F., McIntyre, I.M., Stanley, M. and Gershon, S. "Dexamethasone Suppression Test: Experimental Model in Rats and Effect of Age" **Biological Psychiatry** 19 413-416, 1984.
- 20. Oxenkrug, G.F., McIntyre, I.M. and Gershon, S. "Effects of Pinealectomy and Aging on the Serum Corticosterone Circadian Rhythm in Rats" **Journal of Pineal Research** 1 181-185, 1984.
- 21. McIntyre, I.M., Oxenkrug, G., Stanley, M. and Gershon, S. "The Effect of 5, 7-Dihydroxytryptamine on the Serum Corticosterone Resistance to Suppression by Dexamethasone" **Brain Research** 309 156-158, 1984.
- 22. McIntyre, I.M. and Oxenkrug, G.F. "Electroconvulsive Shock : Effects on Pineal and Hypothalamic Indoles" **Journal of Pineal Research** <u>1</u> 273-279, 1984.
- 23. McIntyre, I.M. and Oxenkrug, G.F. "Chronic Alcohol Administration Increases Corticosterone Resistance to Suppression by Dexamethasone" **Biological Psychiatry** 19 1725-1729, 1984.
- 24. Branconnier, R., Oxenkrug, G.F., McIntyre, I.M., Pomara, N., Harto-Truax, N. and Gershon S. "Prediction of Cortisol Response to Dexamethasone: A Multivariant Approach" **Psychopharmacology** 84 274-275, 1984.
- 25. Pomara, M., Oxenkrug, G.F., McIntyre, I.M., Block, R., Stanley, M. and Gershon, S. "Does Severity of Dementia Modulate Response to Dexamethasone in Individuals with Primary Degenerative Dementia?" **Biological Psychiatry** 19 1481-1487, 1984.

- 26. Lerer, B., Stanley, M., McIntyre, I.M. and Altman, H. "Electroconvulsive Shock and Brain Cholinergic Receptors: Relationship to Anterograde Amnesia" **Life Sciences** 35 2659-2664, 1984.
- 27. Oxenkrug, G.F., McIntyre, I.M., Novak, E., Hryhorczuk, L. and Frohman, C. "Differential Effect of Carbidopa on the Concentration of Rat Pineal and Hypothalamic Indoleamines" **Journal of Pineal Research** 1 349-353, 1984.
- 28. Oxenkrug, G.F., McCauley, R.B., McIntyre, I.M. and Filipowicz, C. "Effects of Clorgyline and Deprenyl on rat pineal melatonin" **Journal of Pharmacy and Pharmacology** 36 55W, 1984.
- 29. Gershon, S., McIntyre, I.M., Pomara, N., Stanley, M. and Oxenkrug, G.F. "Alterations in Cholinergic Receptors Mediate the Effects of Dexamethasone on Corticosterone" **Biological Psychiatry** 20 458-460, 1985.
- 30. Oxenkrug, G.F., McCauley, R., McIntyre, I.M. and Filipowicz, C. "Selective Inhibition of MAO-A but not MAO-B Activity Increases Rat Pineal Melatonin" **Journal of Neural Transmission** 61 265-270, 1985.
- 31. McIntyre, I.M. and Gershon, S. "Interpatient Variations in Antipsychotic Therapy" **Journal of Clinical Psychiatry** 46 3-5, 1985.
- 32. McIntyre, I.M., McCauley, R., Filipowicz, C. and Oxenkrug, G.F. "Carbidopa Effect on Rat Brain Monoamine Oxidase and Pineal Melatonin" **Biological Psychiatry** <u>20</u> 809-811, 1985.
- 33. Novak, E., Stanley, M., McIntyre, I.M. and Hryhorczuk, L. "An HPLC Method for Quantitation of Cyproheptadine in Serum or Plasma" **Journal of Chromatography** 339 457-461, 1985.
- 34. McIntyre, I.M., McCauley, R., Murphy, S., Goldman, H. and Oxenkrug, G.F. "The Effect of Superior Cervical Ganglionectomy on Melatonin Stimulation by MAO-A Inhibition" **Biochemical Pharmacology** 34 3393-3394, 1985.
- 35. Oxenkrug, G.F. and McIntyre, I.M. "Stress Induced Synthesis of Melatonin: Possible Involvement of the Endogenous Inhibitor (Tribulin)" **Life Sciences** 37 1743-1746, 1985.
- 36. LeWitt, P.A., Oxenkrug, G.F., McIntyre, I.M. and McCauley, R.M. "Peripheral Carbidopa Affects Striatal Monoamine Oxidase Activity" **Neurology** 35 1258, 1985.
- 37. Oxenkrug, G.F., McIntyre, I.M., Balon, R., Jain, A.K., Appel, D. and McCauley, R. "Single Dose of Tranylcypromine Increases Human Plasma Melatonin" **Biological Psychiatry** 21 1085-1089, 1986.
- Norman, T., Judd, F., Gregory, M., James, R., Kimber, N., McIntyre, I.M. and Burrows, G. "Platelet Serotonin Uptake in Panic Disorder" **Journal of Affective Disorders** <u>11</u> 69-72, 1986.

- 39. McIntyre, I.M., Judd, F.K., Norman, T.R. and Burrows, G.D. "Plasma Melatonin Concentrations in Depression" **Australian and New Zealand Journal of Psychiatry** <u>20</u> 381-383, 1986.
- 40. Oxenkrug, G.F., McCauley, R.B., Fontana, D.J., McIntyre, I.M. and Commissaris, R.L. "Possible Melatonin Involvement in the Hypotensive Effect of MAO Inhibitors" **Journal of Neural Transmission** <u>66</u> 271-280, 1986.
- 41. McIntyre, I.M. Marriott, P.F., Jefferys, D., Judd, F., Norman, T.R. and Burrows, G.D. "Reduced Plasma Melatonin in Panic Disorder" **Biological Psychiatry** <u>21</u>: 1438-1439, 1986.
- 42. Norman, T.R., Burrows, G.D., Judd, F.K. and McIntyre, I.M. "Serotonergic Involvement in the Aetiology of Panic Attacks: Studies Using the Blood Platelet" **Clinical Neuropharmacology** 9 (Suppl. 4) 162, 1986.
- 43. Judd, F., Norman, T.R., Burrows, G.D. and McIntyre, I.M. "The Dexamethasone Suppression Test in Panic Disorder" **Pharmacopsychiatry** <u>20</u> 99-101, 1987.
- 44. McIntyre, I.M., Norman, T.R., Burrows, G.D. and Armstrong, S.M. "Nocturnal Melatonin Rhythm in Human Plasma and Saliva" **Journal of Pineal Research** <u>4</u> 177-184, 1987.
- 45. McIntyre, I.M., Norman, T.R., Marriott, P.F. and Burrows, G.D. "The Pineal Hormone Melatonin in Panic Disorder" **Journal of Affective Disorders** 12 203-206, 1987.
- 46. Norman, T.R., Piperoglou, M., McIntyre, I.M., Lynch, C. and Burrows, G.D. "Plasma Immunoreactive Beta-Endorphin in Dexamethasone Suppressors and Non Suppressors of Cortisol" **Journal of Affective Disorders** 12 233-239, 1987.
- 47. Norman, T.R., Kimber, N.M., Judd, F.K., Burrows, G.D. and McIntyre, I.M. "Platelet 3H-Rauwolscine Binding in Patients with Panic Attacks" **Psychiatry Research** 22 43-48, 1987.
- 48. Burrows, G.D., McIntyre, I.M. and Norman, T.R. "Treatment Resistant Depression" **N.S.W. Psychopharmacology Newsletter** 2 4-6, 1987.
- 49. Norman, T.R. Acevedo, A., Burrows, G.D., Judd, F.K. and McIntyre, I.M. "Urinary Tribulin Output in Patients with Panic Attacks" **British Journal of Psychiatry** 152 295-296, 1988.
- 50. Oxenkrug, G.F., McIntyre, I.M., McCauley, R. and Yuwiler, A. "Affect of Selective Monoamine Oxidase Inhibitors on Rat Pineal Melatonin Synthesis in Vitro" **Journal of Pineal Research** 5 99-109, 1988.
- 51. McIntyre, I.M., Burrows, G.D. and Norman, T.R. "Suppression of Plasma Melatonin by a Single Dose of the Benzodiazepine Alprazolam in Humans" **Biological Psychiatry** <u>24</u> 108-112, 1988.

- 52. Oxenkrug, G.F., Balon, R. Jain, A.K. and McIntyre, I.M. "Melatonin Plasma Response to MAO-Inhibitor: Influence on Human Pineal Activity?" **Acta Psychiatrica**Scandinavica 77 160-162, 1988.
- 53. Norman, T.R., Sartor, D.M. and McIntyre, I.M. "Clinical and Experimental Studies on the Potentiation of Antidepressant Drugs by Thyroid Hormones" **Medical Science Research** 16 545-550, 1988.
- 54. Norman, T.R., Acevedo, A., McIntyre, I.M., Judd, F.K. and Burrows, G.D. "A Kinetic Analysis of Platelet Monoamine Oxidase Activity in Patients with Panic Attacks" **Journal of Affective Disorders** 15 127-130, 1988.
- 55. Burrows, G.D., McIntyre, I.M., Judd, F.K. and Norman, T.R. "Clinical Effects of Serotonin Re-uptake Inhibitors in the Treatment of Depressive Illness" **Journal of Clinical Psychiatry** 49 8 (Suppl) 18-22, 1988.
- 56. Bhattacharya, S., Glover, V., McIntyre, I.M., Oxenkrug, G.F. and Sandler, M. "Stress Causes and Increase in Endogenous Monoamine Oxidase Inhibitor (Tribulin) in Rat Brain" **Neuroscience Letters** 92 218-221, 1988.
- 57. Norman, T.R., Gregory, M.S., Judd, F.K., Burrows, G.D. and McIntrye, I.M. "Platelet Serotonin Uptake in Panic Disorder: Comparison with Normal Controls and the Effect of Treatment" **Australian and New Zealand Journal of Psychiatry** 22 390-395, 1988.
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- 166. Hubbard, J.A., Navarrete, A.L., Fitzgerald, R.F., McIntyre, I.M. "Acidic Drug Concentrations in Postmortem Vitreous Humor and Peripheral Blood" **Journal of Analytical Toxicology**, 45 (1) 69-75, 2021 https://doi.org/10.1093/jat/bkz076

CHAPTERS IN BOOKS

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- 2. McIntyre, I.M. "Plasma Level Monitoring of Nomifensine" In: Biology of Manic-Melancholic Disorders. Burrows, G.D. (ed.) York Press, Melbourne, Australia, 1979.
- 3. McIntyre, I.M., Norman, T.R., Maguire, K.P., Burrows, G.D., Davies, B.M. and Scoggins, B.A. "Dexamethasone Suppression test and Results" In: Studies in Affective Disorders. Burrows, G.D. (ed.) York Press, Melbourne, Australia, pp. 12-15, 1981.
- 4. Norman, T.R., McIntyre, I.M., Maguire, K.P. and Burrows, G.D. "TRH Infusion Test and Results". In: Studies in Affective Disorders. Burrows, G.D. (ed.) York Press, Melbourne, Australia, pp. 8-11, 1981.
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- 6. Norman, T.R., McIntyre, I.M., Burrows, G.D. and Maguire, K.P. "Relationship between the DST and TRH infusion tests in depressive illness". In: Biological Psychiatry: Recent Studies. Burrows, G.D., Norman, T.R., and Maguire, K.P. (eds.) John Libbey & Co. Ltd., London, pp. 49-52, 1983.
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- 9. Oxenkrug, G.F., Pomara, N., McIntyre, I.M., Branconnier, R.J., Stanley, M. and Gershon, S. "Aging and Cortisol Resistance to Suppression by Dexamethasone: A Positive Correlation". In: Year Book of Endocrinology. Year Book Medical Publishers, Times Mirror, Chicago, 1985.
- 10. Norman, T.R., McIntyre, I.M. and Burrows, G.D. "Propranolol in Schizophrenia". In: Drugs in Psychiatry, Vol. 4 Anticonvulsants and other Drugs. Burrows, Norman, Davies (eds.) Elsevier Amsterdam, pp. 207-215, 1986.
- 11. Burrows, G.D., Norman, T.R., McIntyre, I.M. and Judd, F.K. "Comparative Treatment Approaches to Depression". In: Recent Trends in the Treatment of Depression. G. Johnson (ed.) Duncan Printing (The Boots Co.), pp. 41-44, 1986.

- 12. Burrows, G.D., Norman, T.R., Judd, F.K. and McIntyre, I.M. "Brain, Behaviour and Psychotropic Drugs". In: Hormones and Behaviour. L. Dennerstein, I. Fraser (eds.) Elsevier (Biomedical Division), pp. 485-490, 1986.
- 13. McIntyre, I.M. "Melatonin in Depression". In: Affective Disorders Current Research Aspects, and Psychiatry and Old Age. G.D. Burrows (ed.) University of Melbourne, pp. 14-20, 1988.
- 14. Burrows, G.D., Judd, F.K., Cornwell, J., Norman, T.R. and McIntyre, I.M. "The Treatment of Obsessional Disorders". In: The Major Psychoses and The Diversity of Psychiatry. G.D. Burrows, D. Copolov, B.S. Singh, and P.J.V. Beaumont (eds.) Geigy Psychiatric Symposia. Neil Duncan Printing, North Rocks, N.S.W., Australia, pp. 86-91, 1988.
- 15. Burrows, G.D., McIntyre, I.M., Maguire, K.P., Scoggins, B.A. and Norman, T.R. "Relationship between Plasma Antidepressant Concentrations and Clinical Effects". In: New Directions in Affective Disorders. B. Lerer, S. Gershon, (eds.) Springer-Verlag New York, pp. 611-615, 1989.
- 16. McIntyre, I.M. "Seasonal Affective Disorder (SAD)". In: 55th Beattie Smith Lecture: 25th Anniversary of the Department of Psychiatry. G.D. Burrows (ed.) University of Melbourne, pp. 28-30, 1989.
- 17. Oxenkrug, G.F., Requintina, P. and McIntyre, I.M. "Stimulation of Rat Pineal Melatonin Synthesis by a Single Electroconvulsive Shock: Chronobiological Effect of Antidepressant Therapy?" In. 5-Hydroxytryptamine in Psychiatry: A Spectrum of Ideas. M. Sandler, A. Coppen, S. Harnett (eds.) Oxford University Press: pp 110-115, 1991.

PRESENTATIONS

- 1. Burrows, G.D., Norman, T.R., Maguire, K.P., Fulton, A., McIntyre, I.M., Wurm, J.M.E. and Cheng, H. "Psychiatric Implications of New Work on Central Receptors". Presented at Committee in Postgraduate Medical Education Symposium, Sydney, August, 1979.
- 2. McIntyre, I.M., Burrows, G.D., Dumovic, P. and Norman, T.R. "Nomifensine Plasma Levels and Cardiological Effects". Presented at the 12th CINP Congress, Goteberg, Sweden, June, 1980.
- 3. McIntyre, I.M., Norman, T.R., Burrows, G.D. and Maguire, K.P. "Basic Pharmacokinetics of Nomifensine". Presented at the World Conference of Clinical Pharmacology and Therapeutics, London, England, August, 1980.
- 4. McIntyre, I.M., Norman, T.R. and Burrows, G.D. "Nomifensine Pharmacokinetics, Cardiovascular Effects and Clinical Response". Presented at the 14th Annual Meeting of the Australian Society of Clinical and Experimental Pharmacologists, Australian National University, December, 1980.

- 5. McIntyre, I.M., Norman, T.R., Burrows, G.D., Maguire, K.P. and Davies, B.M. "Relevance of Neuroendocrine Tests in Depression". Presented at the CINP Congress, Hong Kong, October, 1981.
- 6. McIntyre, I.M., Norman, T.R., Burrows, G.D., Davies, B.M. and Maguire, K.P. "Dexamethasone Suppression and TRH Stimulation Tests in Depression". Presented at the 13th CINP Congress, Jerusalem, June, 1982.
- 7. Norman, T.R., McIntyre, I.M., Maguire, K.P. and Burrows, G.D. "The Pharmacokinetics of Mianserin in Depressed Elderly Inpatients". Presented at the 13th CINP Congress, Jerusalem, June, 1982.
- 8. Davies, B.M. McIntyre, I.M., Norman, T.R. and Burrows, G.D. "Dexamethasone Non-Suppression and Poor Response to Antidepressants". Presented at the 13th CINP Congress, Jerusalem, June, 1982.
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- 10. McIntyre, I.M. and Stanley, M. "Postmortem Changes in Serotonin, 5-hydroxyindoleacetic Acid and Tryptohpan in Rat Brain". Presented at the 38th Society of Biological Psychiatry, New York, NY, May, 1983.
- 11. Oxenkrug, G.F., McIntyre, I.M., Pomara, N., Stanley, M. and Gershon, S. "Aging and Hypothalamic-Pituitary-Adrenal Axis". Presented at the 38th Society of Biological Psychiatry, New York, NY, May, 1983.
- 12. Lerer, B., Stanley, M., Altman, H. and McIntyre, I.M. "ECT-Induced Anterograde Amnesia: A Possible Cholinergic Mechanism" Presented at the Society for Neuroscience, Boston, MA, 1983.
- 13. Oxenkrug, G.F., McIntyre, I.M., Stanley, M. and Gershon, S. "Plasma Corticosterone Circadian Rhythm in the Old and Pinealectomized Rats". Presented at the XIV Acta Endocrinologica Congress (Melatonin Symposium), Malno, Sweden, July, 1983.
- 14. Oxenkrug, G.F., McIntyre, I.M., Pomara, N., Stanley, M. and Gershon, S. "Postdexamethasone cortisol increases with aging". Presented VII World Congress of Psychiatry, Vienna, July, 1983.
- 15. Stanley, M., McIntyre, I.M. and Gershon, S. "Postmortem Serotonin Metabolism in Suicide Victims". Presented at the ACNP Congress, Puerto Rico, December, 1983.
- 16. Oxenkrug, G.F., Branconnier, R., McIntyre, I.M., Pomara, N., Stanley, M., Harto-Truax, N. and Gershon, S. "Factors Influencing Serum Cortisol Response to Dexamethasone in Normal Volunteers". Presented at the ACNP Congress, Puerto Rico, December, 1983.
- 17. Gateless, D., Stanley, M., Traskman-Bendz, L., McIntyre, I.M. and Gilroy, J. "Gradients of 5-HIAA and HVA in Lumbar CSF in the Lying and Sitting Positions". Presented at AAN, 1983.

- 18. Peslow, E., Stanley, M., McIntyre, I.M., Deutsch, S., Goldring, N. and Fieve, R. "The Dexamethasone Suppression Test Relationship of Dosage to Clinical Symptoms and Therapeutic Response". Presented at the ACNP Congress, Puerto Rico, December, 1983.
- 19. Oxenkrug, G.F., McIntyre, I.M., Jones, D., Jackson, E. and Sitaram, N. "The Comparison of 0.5 and 1 mg of Dexamethasone in Depressed, Schizoaffective and Schizophrenic Patients". Presented at Biological Psychiatry, L.A., May, 1984.
- McIntyre, I.M. and Oxenkrug, G.F. "Chronic Alcohol Increases Corticosterone Resistance to Dexamethasone Suppression". Presented at Biological Psychiatry, L.A., May, 1984.
- 21. Moore, N., Lerer, B., McIntyre, I.M. and Oxenkrug, G.F. "Cortisol Resistance to suppression by Dexamethasone in Manic Patients". Presented at Biological Psychiatry, L.A., May, 1984.
- 22. McIntyre, I.M., Frohman, C.E., Novak, E., Gershon, S. and Oxenkrug, G.F. "Garbidopa, Dexamethasone Effect and Pineal Indoles". Presented at APA, Los Angeles, May, 1984.
- 23. Oxenkrug, G.F., McIntyre, I.M. and Gershon, S. "Serotoninergic and Cholinergic Supresensitivity and Increased Hypothalamic-Pituitary-Adrenal Response to Dexamethasone and Upregulation of Serotonin Receptors". Presented at 9th IUPHAR Congress of Pharmacology, London, July, 1984.
- 24. Oxenkrug, G.F., McCauley, R.B., McIntyre, I.M. and Filipowicz, C. "Effect of Clorgyline and Deprenyl on Rat Pineal Melatonin". Presented at: Amine Oxidases: A Cambridge Workshop, Cambridge, August, 1984 (J. Pharmacy and Pharmacology (Suppl.) November, 1984).
- 25. McIntyre, I.M., Jain, A.K., Balon, R., McCauley, R.B. and Oxenkrug, G.F. "Selective Monoamine Oxidase Inhibitors and Melatonin". Presented at Biological Psychiatry, Dallas, May, 1985.
- 26. Jain, A.K., McIntyre, I.M., Taylor, L., Sandor, G. and Oxenkrug, G.F. "Stress, Melatonin and Aging". Presented at Biological Psychiatry, Dallas, May, 1985.
- 27. Oxenkrug, G.F., McIntyre, I.M., Jain, A.K., Balon, R., Taylor, L.P. and Gershon, S. "Melatonin and Aging". Presented at APA, Dallas, May, 1985.
- 28. Oxenkrug, G.F., McCauley, R.B., McIntyre, I.M., Jain, A.K., Balon, R. and Yuwiler, A. "Melatonin and Antidepressant Effect of Monoamine Oxidase Inhibitors". Presented at A.C.N.P., Maui, Dec. 1985.
- 29. McIntyre, I.M., Morse, C., Dennerstein, L. and Kennaway, D. "Urinary 6-Sulphatoxy-Melatonin Levels in Pre-Menstrual Syndrome". Presented at 8th International Congress of Psychosomatic Obstetrics and Gynaecology, Melbourne, March, 1986.
- 30. Burrows, G.D., Norman, T.R. and McIntyre, I.M. "Brain, Behaviour and Psychotropic Drugs". Presented at 8th International Congress of Psychosomatic Obstetric and Gynaecology, Melbourne, March, 1986.

- 31. McIntyre, I.M. "Suppression of Melatonin by Light: A Dose Response Effect". Presented at Pineal Research Workshop, Monash University, November, 1986.
- 32. McIntyre, I.M., Norman, T.R., Marriott, P.F., Judd, F.K. and Burrows, G.D. "The Pineal Hormone Melatonin in Psychiatric Illness". Presented at ASCEP, Melbourne, December, 1986.
- 33. McIntyre, I.M., Norman T.R., Marriott, P.F., Judd, F.K. and Burrows, G.D. "The Pineal Hormone Melatonin in Psychiatric Disorders". Presented at ASPR, Melbourne, December, 1986.
- 34. Norman, T.R., Burrows, G.D., Judd, F.K. and McIntyre, I.M. "Serotoniergic Involvement in the Aetiology of Panic Attacks: Studies using the Blood Platelet". Presented at 15th C.I.N.P. Puerto Rico, December, 1986.
- 35. Norman, T.R., Judd, F.K., Gregory, M.S., James, R.H., Kimber, N.M., McIntyre, I.M. and Burrows, G.D. "Platelet Serotonin Uptake in Panic Disorder". Presented at A.S.C.E.P, Melbourne, December, 1986.
- 36. Burrows, G.D., Norman, T.R., McIntyre, I.M., Scoggins, B.A. and Maguire, K.P. "Relationships Between Plasma Levels and Clinical Response". Presented at the International Conference on New Directions in Affective Disorders, Jerusalem, April, 1987.
- 37. McIntyre, I.M., Judd, F.K., Marriott, P.M., Burrows, G.D. and Norman, T.R. "Plasma Melatonin Levels in Affective States". Presented IUPHAR, Sydney, August, 1987.
- 38. Norman, T.R. and McIntyre, I.M. "Characterisation of a High Affinity Binding Site for Pentagastrin in Rat Brain". Presented IUPHAR, Sydney, August, 1987.
- 39. Burrows, G.D., Judd, F.K., Cornwell, J., Norman, T.R. and McIntyre, I.M. "The Treatment of Obsessional Disorders". Presented at XIIIth Ciba-Geigy Psychiatric Symposium, Sydney, December, 1987.
- 40. McIntyre, I.M. and Burrows, G.D. "Seasonality, Biochemistry and Mood". Presented at Annual Winter Conference on Psychological Medicine, Thredbo, July, 1988.
- 41. McIntyre, I.M., Marriott, P.M., Judd, F.K., Burrows, G.D. and Norman, T.R. "Plasma Melatonin Levels in Affective States". Presented at 16th CINP Congress, Munich, August, 1988.
- 42. Burrows, G.D., Norman, T.R., McIntyre, I.M. and Judd, F.K. "An Overview of Monoamine Oxidase Inhibitors". Presented at 16th CINP Congress, Munich, August, 1988.
- 43. Norman, T.R., Burrows, G.D., Judd, F.K. and McIntyre, I.M. "Monoamine Oxidase, Monoamine Oxidase Inhibitors and Panic Disorder". Presented at 16th CINP Congress, Munich, August, 1988.

- 44. McIntyre, I.M. "Seasonal Affective Disorder". Presented at The University of Melbourne 25th Anniversary of the Department of Psychiatry, Melbourne, April, 1989.
- 45. McIntyre, I.M. "Light Treatment for Seasonal Affective Disorder". Presented at The Melbourne Clinic, Postgraduate Education Programme, Melbourne April, 1989.
- 46. Armstrong, S.M., McIntyre, I.M., Norman, T.R. and Burrows, G.D. "Human Melatonin Suppression by Light at Night". Presented at the Annual Meeting of the Society for Light Treatment and Biological Rhythms, NIH, June, 1989.
- 47. McIntyre, I.M. "Plasma Melatonin Concentrations in Panic Disorder". Presented at the Society of Biological Psychiatry, New York, May, 1990.
- 48. McIntyre, I.M., Norman, T.R., Burrows, G.D. and Armstrong, S.M. "Melatonin Supersensitivity to a Dim Light Challenge in SAD". Presented at the SLTBR meeting, New York, May, 1990.
- 49. Norman, T.R., Burrows, G.D. and McIntyre, I.M. "Tribulin, Isatin and Stress: Common Effects on the Serotonergic System." Presented at ASPR, Melbourne, December, 1990.
- 50. McIntyre, I.M. and Drummer, O.H. "HPLC Method for the Determination of Benzodiazepines in Post Mortem Tissue: Importance of Measuring Nitro-Reduction Metabolites". Presented at the 11th Australasian and New Zealand International Symposium on the Forensic Sciences. Hobart, August, 1992.
- 51. Drummer, O.H., Kotsos, A. and McIntyre, I.M. "A Class-Independent Drug Screen in Forensic Toxicology using a Photodiode Array Detector". Presented at the International Symposium on Forensic Toxicology. F.B.I. Academy, Virginia, U.S.A., June 1992.
- 52. Couper, F.J., McIntyre, I.M. and Drummer, O.H. "Detection of Psychotropic Drugs in Human Scalp Hair" Clinical and Experimental Pharmacology and Physiology (Suppl. 21). Eds. J.J. Reid, M.S. Ching, Blackwell Scientific Publ. (Melb). p 15, 1992.
- 53. Cerasuolo, D., McIntyre, I.M. and Drummer O.H. "Postmortem Changes in Drug Concentration." Presented at the TIAFT meeting, Leipsig, Germany, Sept. 1993.
- 54. McIntyre, I.M., King, C.V. and Drummer, O.H. "Postmortem Clomipramine Concentrations: Therapeutic or Toxic Levels?" Presented at the S.O.F.T./C.A.T. Joint Meeting, Phoenix, U.S.A. October 1993.
- 55. Gerostamoulos, J., Crump, K., McIntyre, I.M. and Drummer, O.H. "Simultaneous Determination of 6-Monoacetylmorphine, Morphine and Codeine in Biological Fluids using High Pressure Liquid Chromatography with combined UV and Electrochemical Detection." Presented at the International Association of Forensic Toxicologists, 31st. Triennial International Meeting. Leipzig, August 1993.
- 56. Couper, F.J., McIntyre, I. M. and Drummer, O.H. "Method for Quantifying Antidepressant and Antipsychotic Drug Levels in Post-mortem Human Scalp Hair." Presented at the International Association of Forensic Toxicologists 31st. Triennial International Meeting, Leipzig, August, 1993.

- 57. Couper, F.J., McIntyre, I.M. and Drummer, O.H. "Detection of Antidepressant and Antipsychotic Drugs in Human Scalp Hair." Presented at the International Association of Forensic Sciences 13th. Meeting, Dusseldorf, August, 1993.
- 58. King, C.V., McIntyre, I.M., Ranson, D.L. and Drummer, O.H. "The Detection and Quantitation of Moclobemide in Postmortem Specimens." Presented at the 12th. Australian and New Zealand International Symposium on the Forensic Sciences. Auckland, New Zealand, November, 1994.
- 59. McIntyre, I.M., Peace, A., King, C.V., Lynch, M.S. and Drummer, O.H. "The Detection and Quantitation of Fluoxetine and Norfluoxetine in Postmortem Specimens." Presented at the Silver Anniversary Meeting of S.O.F.T., Baltimore, U.S.A., October, 1995.
- 60. McIntyre, I.M., Fayle, P.A.H., Olumbe, A.K. and Drummer, O.H. "Postmortem Concentrations of Clozapine and Desmethylclozapine in two Coronial Cases." Presented at the XXth C.I.N.P. Congress, Melbourne, Australia, June, 1996.
- 61. McIntyre, I.M., Staikos, V. and Drummer, O.H. "Fatality Involving Elevated Concentrations of Hydroxychloroquine and Codeine." Presented at The 13th Australian and New Zealand Forensic Science Society Meeting, Sydney, Australia, September 1996.
- 62. Crump, K.L., McIntyre, I.M. and Drummer, O.H. "Analysis of Nitrates by Ion-pairing HPLC Dual UV/IC Detection." Presented at The 13th Australian and New Zealand Forensic Science Society Meeting, Sydney, Australia, September 1996.
- 63. Kotsos, A.K., McIntyre, I.M. and Drummer, O.H. "Drug Concentrations in Postmortem Muscle and Fat." Presented at The 13th Australian and New Zealand Forensic Science Society Meeting, Sydney, Australia, September 1996.
- 64. Peace, A.P., McIntyre, I.M. and Drummer, O.H. "Analysis of Drugs in Skin." Presented at The 13th Australian and New Zealand Forensic Science Society Meeting, Sydney, Australia, September 1996.
- 65. Drummer, O.H., King, C.V., Kotsos, A., Peace, A., Crockart, H. and McIntyre, I.M. "Body Burden of Benzodiazepines in Humans." Presented at the 34th TIAFT Meeting, Interlaken, Switzerland. August 1996.
- 66. King, C.V., McIntyre, I.M. and Drummer, O.H. "Detection of Selected Drugs in Cadaveric Femoral Bones." Presented at the 35th TIAFT Meeting, Padova, Italy, August 1997.
- 67. McIntyre, I.M. "Forensic Toxicology: Evidence of Significant Drug/Chemical Alterations Due to Post-Mortem Processes." Presented at SIM Annual Meeting, Reno, Nevada, U.S.A. August 1997.
- 68. Pricone, M.G., King, C.V., Drummer, O.H., Opeskin, K. and McIntyre, I.M. "Post-Mortem Investigation of Lamotrigine Concentrations." Presented at the 14th Australian and New Zealand Forensic Science Society Meeting, Adelaide, September, 1998.

- 69. Phelan, M.H., Crump, K., Kotsos, A., McIntyre, I.M. and Drummer, O.H. "A dual Detection System for the Screening of Toxicology Specimens using Capillary Gas Chromatography with Combined Nitrogen Phosphorous and Mass Spectrometric Detection." Presented at the 16th. ANZSMS Conference 1997.
- 70. McIntyre, I.M., King, C.V., Baratto, M., Drummer, O.H. "Post-Mortem Drug Analyses in Bone and Bone Marrow." Presented at the 6th International Congress of Therapeutic Drug Monitoring & Clinical Toxicology Meeting. Cairns. September 1999.
- 71. Gerostamoulos, J., Staikos, V., McIntyre, I.M. and Drummer, O.H. "Toxicology of Heroin-Related Deaths in Victoria, Australia." Presented at the Society of Forensic Toxicologist Meeting, San Juan, Puerto Rico, October 9-14, 1999.
- 72. Goeringer, K.E., McIntyre, I.M. and Drummer, O.H. "Combined screening and confirmation analysis of drugs of abuse in postmortem specimens using LC-MS following solid-phase extraction." Presented at SOFT, Detroit, MI, September 2001.
- 73. McIntyre, I.M., Gary, R., Sherrard, J., Parker, D., Estrada, J. and Whitmore, R.E. "2,4-Dinitrophenol (DNP): An Unusual Fatality" Presented at SOFT/TIAFT, Washington D.C., September 2004.
- 74. Parker, D.R. and McIntyre, I.M. "Postmortem Quetiapine: Therapeutic or Toxic Concentrations?" Presented at SOFT/TIAFT, Washington D.C., September 2004.
- 75. Kirkton, C. and McIntyre, I.M. "Therapeutic and Toxic Concentrations of Mirtazapine (Remeron) in Postmortem Cases. Presented at SOFT, Nashville, TN, September 2005.
- 76. Cantrell, F.L., Ogera, P., Mallett, P. and McIntyre, I.M. "Apparent Oral Methylphenidate Fatality with Postmortem Concentrations. Presented at the NACCT (American Academy of Clinical Toxicology Inc.), Las Vegas, NV, October 2012.
- 77. McIntyre, I.M. "Workshop: Forensic Scientists' Challenges and Successes; Forensic Toxicology". Presented at the American Academy of Psychiatry and the Law, 44th Annual Meeting, San Diego, CA, October 24-27 2013.
- 78. Logan, B.K., Labay, L.M., Caruso J.L., Gilson, T.B., Lemos, N., McIntyre, I.M., Stoppacher, R., Knight, L.D., Wiens, A., Williams, E. "Synthetic Cannabinoid Drugs as a Cause or Contributory Cause of Death" Presented at NAME, Tucson, AZ, November 2014.
- 79. McIntyre, I.M. "Detection and Quantitation of some Newer Synthetic Sympathomimetic Drugs" Presented at CAT, San Diego, CA, November 2014.
- 80. McIntyre, I.M. "Postmortem Interpretation Discussion Panel" Presented at CAT, Indian Wells, CA, November 2016.

<u>Schedule of Fees – Iain McIntyre, Ph.D, Forensic Toxicologist – 2025</u>

- a. Retainer: \$5,000.00 (\$3,000 Non-refundable; \$2,000 Refundable)
- b. Report Review/Writing: \$500.00/hour
- c. Report Review/Writing Expedite Fee (Reports requested within 14 days of due date: \$500.00/hour)
- d. Consultation/Testimony: \$500.00/hour; Depositions at \$500/hour with (minimum deposition time of 4.0 hours is charged per deposition)
- e. Daily Court Rate 8.0 hours or \$4,000.00 whether or not appears in court if noticed to appear. Clients billed at \$500/hour after 8.0 hours
- f. Travel expenses: Paid in advance
- g. Travel Day: \$2,400/day (out of town travel: \$3,200/day plus expenses)
- h. Secretarial Services: \$60.00/hour
- i. Postage: Actual as incurred
- j. Fax Sent/Received: \$1.00/page, plus long-distance charges if applicable
- k. Long Distance Telephone (including cellular): \$0.20/minute (or actual if greater)
- I. Duplication Costs: \$0.20/ copy (or actual if greater)
- m. Mileage: \$0.65/mile
- n. UPS/Fed Ex/Courier: Actual as incurred
- o. Cancellation/continuance of Deposition with 14 days or more notice: \$400.00
- p. Cancellation/continuance of Trial with 7 days or less notice: \$1,000.00
- q. Cancellation/continuance of Trial with 8-13 days or less notice: \$500.00

IAIN M. MCINTYRE, Ph.D. FORENSIC TOXICOLOGIST, CONSULTANT, AND EXPERT WITNESS

STYLE	COURT	DOCKET No.	DATE	KIND OF TRIAL	DEPO/TRIAL	ATTORNEYS
US Government	US Military Courts		2007-Present	Criminal	Trial	US Government
Shipsey	Worcestershire County Council Coroners Court, U.K.		1/11/2018	Civil	Inquest	
Rodriguez v Ulloa	Superior Court of California, County of Orange - Central Justice Center	30-2016-00853728	2/27-28/2018	Civil	Trial	Selman Breitman - Asir Fiola
Detandt v 7Eleven Buchholtz	Superior Court of California, County of San Diego	37-2015-00033919-CU-PA-CTL	4/9/2018	Civil	Deposition	Gnau&Tamez Law Group - Steve Gnau
California v Palmer	Superior Court of California, County San Diego - Central Division	CD266518	4/10/2018	Criminal	Trial	District Attorney
Conte v Harvey, Firefly et al.	Superior Court of California, County of San Diego - North County	37-2016-00004326-CU-PA-NC	4/16/2018	Civil	Deposition	Gnau&Tamez Law Group - Daniel Tamez
Camacho v City of Rialto and Victor Dee Herrera	Superior Court of California, County of San Bernardino - Central District	CIVDS1609926	5/7/2018	Civil	Deposition	Bordin Semmer LLP
Mugrove v Herrold et al.	Superior Court of California, County of Los Angeles, Central District	BC673010	6/4/2018	Civil	Deposition	Lewis Brisbois Bisgaard & Smith - Michael Moss
S.A.C, Nunez v County of San Diego	United States District Court, Southern District of California	17cv1893-L(BLM)	6/19/2018	Civil	Deposition	Guizar, Henderson & Carrazco
Jenkins v Toyota Motor Sales	District Court - Clark County	A-16-741337-C	9/12/2018	Civil	Deposition	Snell & Wilmer
Lamar v San Gorgonio Memorial Hospital, et al	Superior Court of California, County of Riverside, Civil Courthouse	RIC 1411188 (c/w RIC 1513784)	2/21/2019	Civil	Deposition	Law Offices of Patricia A. Law
Borowicz v Washington	Franklin County Court of Common Pleas, Ohio	14CV006371	4/11/2019	Civil	Trial	Poling Law - S. Sellers
Leigh/Bailey/Porter v Plunkett	Superior Court of California, County of San Diego, Central Division	37-2018-00042032-CU-PO-CTL	5/10/2019	Civil	Deposition	Gates, Gonter, Guy, Proudfoot, Muench, LLP
Dunnett v Casa Bella, et al.	Superior Court of California, County of Orange - Civil Complex Center	30-2017-00950244-CU-PP-CXC	6/11/2019	Civil	Deposition	Hewitt&Truszkowski - R. Mac Prout
Luguna v Community Protective Services, et al	Superior Court of California, County of San Bernardino	CIVDS1516654	6/26/2019	Civil	Deposition	Hanger, Steinberg, Shapiro, Ash - Mr. Walls
Cameron v Meza	Superior Court of California, County of Los Angeles, Central District	BC689540	6/28/2019	Civil	Deposition	Carpenter, Zuckerman, Rowley - Mr. Zuckerman
Martinez Kelly SII Carolyn Kelly v Algos	Superior Court of California, County of San Diego, Central Division	37-2018-00010369-CU-MM-CTL	7/22/2019	Civil	Deposition	Neil Dymott Frank McCabe & Huson
Cameron v Meza	Superior Court of California, County of Los Angeles, Central District	BC689540	8/14/2019	Civil	Trial	Carpenter, Zuckerman, Rowley - Mr. Zuckerman
Erick/Ferrell v Kelly	Superior Court of California, County of San Diego	37-2018-00005222-CU-PO-CTL	8/20/2019	Civil	Deposition	Neil Dymott Frank McCabe & Huson
Moss v CEMEX Construction	Superior Court of California, County of Los Angeles	BC707708	8/22/2019	Civil	Deposition	Bordin Semmer LLP
People of California v Gregory Boiser	Superior Court of California, County of San Bernardino	16CR-009210	2/25/2020	Criminal	Trial	Public Defender: Joni Sinclair
Williams v Kohl's Dept Stores	United States District Court, Central Division of California, Eastern Division	5:19-cv-00397-JGB-SHKx	5/1/2020	Civil	Deposition	Samuel Ogbogu, Inc. A Professional Law Corporation
Migasi v Kolstad	Superior Court of California, County of Orange - Central Justice Center	30-2018-01029710 CU-PA-CJC	9/17/2020	Civil	Deposition	Law Off Fay Arghavani-Sassan Mackay
Brownlee v COSD	Superior Court of California, County of San Diego, Central Division	37-2019-00023988-CU-PO-CTL	4/20/2021	Civil	Deposition	City of San Diego
Cignarella v Mendoza, Sysco Inc., et al.	Superior Court of California, County of San Diego, Central Division	37-2018-00048372-CU-PA-CTL	4/27/2021	Civil	Deposition	Gilleon Law Firm - Daniel Petrov
U.S. Customs & Border Protection (CBP) - CBPT Jeffr	National Treasury Employees Union (NTEU) Capter 105	N/A	5/20-21/2021	Civil	Arbitration	National Tresury Employees Union - Eileen Bissen
Greenway v Leveck	United States District Court, Middle District of Tennessee, Nashville Division	3-20-CV-58	6/30/2021	Civil	Deposition	Moseley&Moseley - Bryan Moseley
McFarland v Gonzales	Superior Court of California, County of Ventura	56-2019000534117-CU-PA-VTA	8/2/2021	Civil	Deposition	HangerSteinbergShapiro&Ash -K.Parido_M.Shapiro
US v Jahvaris, Springfield	United States District Court, Southern District of California	20-CR-2923-LAB	8/25/2021	Criminal	Trial	Assistant US Attorney - Stephen Wong
Figueroa v AT&T	Superior Court of California, County of Los Angeles, Central District	8C701989	9/22/2021	Civil	Deposition	Sandoval Law - Abraham Sandoval
California v Kejuan Bynum	Superior Court of California, County of San Luis Obispo	19F-04604	10/29/2021	Criminal	Trial	Scott Taylor
McFarland v Gonzales	Superior Court of California, County of Ventura	56-2019-00534117-CU-PA-VTA	11/2/2021	Civil	Trial	HangerSteinbergShapiro&Ash -K.Parido M.Shapiro
Hernandez v Moreno	Superior Court of California, County of San Diego, Central Division	37-2018-00055704-CU-PO-CTL	3/8/2022	Civil	Deposition	Sims Law Firm - Jerome D. Rybarczyk
Gaitlin v MAPS	Superior Court of California, in and for the County of Monterey	20CV002753	6/28/2022	Civil	Deposition	Gordon Rees Scully Mansukhani - Chuck Custer
Brownlee v COSD	Superior Court of California, County of San Diego, Central Division	37-2019-00023988-CU-PO-CTL	7/26/2022	Civil	Trial	City of San Diego
Ruvalcaba v City of Victorville	Superior Court of California, County of San Bernardino	CIVDS1920990	8/3/2022	Civil	Deposition	THE HOMAMPOUR LAW FIRM - RONAN DUGGAN
Karakhanyan v White	Superior Court of California, County of Los Angeles, Central District	19STCV26017	10/27/2022	Civil	Deposition	Carpenter & Zuckerman - ROBERT J. OUNJIAN
Dykstra v Karamanoukian	Superior Court of California, County of Los Angeles	BC696395	11/7/2022	Civil	Deposition	David Weiss Law - Pamela Owen, Patti Courchaine
Gaitlin v MAPS	Superior Court of California, in and for the County of Monterey	20CV002753	11/16/2022	Civil	Trial	Gordon Rees Scully Mansukhani - Chuck Custer
U.S.of A. v Alexander Declan Bell Wilson	U.S.District Court, Central District of California - Los Angeles - First Street	21-cr-00222	5/15/2023	Criminal	Trial	Werksman Jackson&Quinn - Caleb Mason/Richard Beada
Dennis v Synergy Electic Company	Superior Court of California, County of San Diego	37-2020-00032070-CU-PO-CTL	5/26/2023	Civil	Deposition	Thomas Lucas - Kerry Stack
California v Ciccimaro	Superior Court of California, County of San Diego, Central Division	CD293903	6/22-23/2023	Criminal	Trial	Vista Criminal Law - Peter M. Liss
Johnson v Altamirano	Superior Court of California, County of Stanislaus	CV-22-001603	10/3/2023	Civil	Deposition	Carpenter & Zuckerman-Washington - Lance Behringer
Greenway v Leveck	United States District Court, Middle District of Tennessee, Nashville Division	3-20-CV-58	10/10/2023	Civil	Trial	Moseley&Moseley - Bryan Moseley
Adams v Far Horizons	Superior Court of California, County of Amador	20-CVC-11702	10/17/2023	Civil	Deposition	Olson Law Group - Joel Witzman
Moore v J&L Rentals	Superior Court of California, County of Madera	MCV082756	1/22/2024	Civil	Deposition	Dordick Law Corporation - Dylan Dordick
Nazari v Cardinal Logistics Management Corp	Superior Court of California, County of Los Angeles	22STCV20881	1/30/2024	Civil	Deposition	SNYDER BURNETT EGERER, LLP - Stacey Walker
Rosas v Zinn Packing Company	Superior Court of California, County of Imperial	ECU002194	3/4/2024	Civil	Deposition	Walter Clark Legal Group - Lawrence Pressley
Adams v E-Z Mart, Inc	United States District Court, Eastern District of Oklahoma	23-CV-278-RAW-JAR	4/25/2024	Civil	Deposition	Brewster & De Angelis, P.L.L.C Montgomery Lair
People of California v Farzad Dilmaghanian	Superior Court of California, County of San Diego, East County Division	SCE 399297	7/31/2024	Criminal	Trial	Gary Gibson - San Diego County Public Defender
Payton v LACMTA	Superior Court of California, County of Los Angeles, Central District	20STCV24719	9/13/2024	Civil	Deposition	Ash Ashour - Ashour Yehoshua, APC
Delgado v CONWAY	Superior Court of California, Orange County	30-2023-01392663	10/3/2024	Civil	Deposition	Cullins & Grandy, LLP - Heather G. Cote
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IAIN M. McINTYRE, Ph.D.

FORENSIC TOXICOLOGIST, CONSULTANT, AND EXPERT WITNESS

February 3, 2025

John Whitefleet, Esq. Law Offices of Porter Scott 2180 Harvard Street, Suite 500 Sacramento, CA 95815

RE: Heimbach (Silva) v Stanislaus County

I, Iain M. McIntyre, Ph.D. declare as follows:

I am an expert in the field of forensic toxicology. I have BS, MS and PhD degrees and am formerly the Chief Toxicologist and Manager of the Forensic Toxicology Laboratory at the County of San Diego Department of the Medical Examiner. I am a forensic toxicologist with 34 years of experience and have contributed to more than 166 peer reviewed publications. I am a member of various professional organizations in forensic toxicology, including The International Association of Forensic Toxicologists (TIAFT), the Society of Forensic Toxicologists (SOFT), the California Association of Toxicologists (CAT), and the American Academy of Forensic Sciences (AAFS).

I have researched and published on the issues of drug analysis, and drugs and chemicals as causes of toxicity and death. I have been qualified as an expert in forensic toxicology in the United States District Courts in Los Angeles and San Diego, and Superior Courts in San Bernardino, Riverside, Orange, Kern, San Luis Obispo, Ventura, and San Diego Counties (Hall of Justice-San Diego, El Cajon, Chula Vista, and Vista), Franklin County Court (Ohio), Suffolk County Court (Commonwealth of Massachusetts), and United States Military Courts. My qualifications and experience are listed in my curriculum vitae which is attached as **Exhibit 1**. A list of the cases in which I have testified as an expert during the last few years are attached hereto as **Exhibit 2**.

In forming my opinions in this case, I relied on my knowledge, education, and experience. I also reviewed the following documents and records to gain an understanding of the facts:

- 1. Second Amended Complaint;
- 2. Audio Videos;
- 3. Photos:
- 4. Stanislaus County Sheriff's Department Controlled Document Officer's Reports;
- 5. Stanislaus County Sheriff's Department Table of Contents; including several Policies;
- 6. California Post Documents for Officers Camara and Xiong;
- 7. Deposition of Eric Bavaro;
- 8. Deposition of Justin Camara;

- 9. Deposition of Za Xiong;
- 10. Deposition of Dorothey Heimbach;
- 11. Hospital Records: Sutter Health Memorial Medical Center, Modesto; and
- 12. Stanislaus County Death Certificate: Anthony Michael Silva.

This report contains a summary of the evidence, methodologies, conclusions, and opinions that I presently intend to express, offer, and employ with respect to the drugs found in the possession – and on the toxicology testing – of Mr. Anthony Silva. All opinions are held to a reasonable degree of probability based on my knowledge, education, experience, and review of the relevant scientific literature together with the evidence, documents, and information currently available and reviewed by me thus far in my investigation. To the extent my investigation discloses additional data, information, and documents that may have an impact on the evidence, methodologies, conclusions, and opinions discussed here, I reserve the right, pursuant to applicable rules, to supplement this report.

Background

On 10/08/2022, at approximately 14:08 hours, Mr. Silva was approached and restrained by sheriff's deputies. He was reported to be making incoherent statements, slurring his speech, mumbling, rambling, and was believed to be under the influence of a stimulant narcotic. He would not comply with the deputies' orders and their attempts of restraint. He actively resisted and was taken to the ground. Mr. Silva was subsequently detained by the sheriff's deputies. Two individually packed plastic baggies containing a crystalline substance – consistent with methamphetamine – were located in his backpack.

Earlier, Mr. Silva was reported to be displaying erratic behavior. He was reported to be chasing after another man and attempted to hit him with a closed fist. Mr. Silva continued to run up to other civilians and act in an aggressive nature. He was suspected to be under the influence. Mr. Silva was a known transient with a history of drug abuse and trying to chase and attack people when under the influence of narcotics. He was known to be combative and display violent behavior.

Following an evaluation by paramedics from the American Medical Response and Modesto Fire, Mr. Silva was transported to Sutter Health Memorial Medical Center, Modesto.

Toxicology Findings/Results

Mr. Silva had a urine sample collected in hospital (Sutter Health Memorial Medical Center, Modesto) which tested positive for Amphetamines (Methamphetamine), Cannabinoids, and Opiates. (The urine specimen was collected at 02:45 hours on 10/09/2022.)

Mr. Silva received hydromorphone medication in hospital prior to this specimen collection which may account for the positive Opiates result.

Drugs Detected

Amphetamines (Methamphetamine)

Although it is available therapeutically for the treatment of obesity, narcolepsy, and attention deficit disorders, methamphetamine is commonly used illicitly as a central nervous system (CNS) stimulant. Methamphetamine can be ingested by a variety of routes: oral ingestion; nasal insufflation; smoking; and intravenous use.

With intravenous use, peak methamphetamine concentrations are achieved almost instantaneously. Smoking produces peak concentrations later, at about 2.5 hours. Methamphetamine is well absorbed from the gastrointestinal tract reaching peak concentrations about 2.5-7.5 hours after ingestion; with most reports showing the peak levels achieved by 3 hours [1].

Although the initial "rush" may persist for 5-30 minutes, subjects report that the effects following a dose of methamphetamine can last up to about 12 hours after smoking. Consequently, the effects are not directly related to the peak blood concentrations.

At low (or therapeutic) doses methamphetamine can reduce appetite, increase alertness and energy, reduce fatigue and drowsiness, produce a general increase in psychomotor activity, give a general sense of wellbeing, and improve cognitive performance [2, 3]. Peripheral effects include increased pulse, and blood pressure [2].

At higher doses and with chronic abuse, however, methamphetamine can produce euphoria, elation, excitability, agitation, sexual arousal, motor agitation, dizziness, and also negative effects on self-perception, critical judgement, attention, risk taking, mood, and motor restlessness [2].

Methamphetamine is eliminated relatively slowly from the body. Blood concentrations of methamphetamines decrease with an average half-life of 10 hours (range 6 to 15 hours) [4], i.e. half is gone from the system in 10 hours, three fourths in 20 hours, seven eights in 30 hours.

While patterns of abuse vary from occasional periodic use, a high percentage of users are addicted or habitual abusers, often using the stimulant at least several times a week. In addition to being addicted to methamphetamine, chronic abusers may exhibit symptoms that include significant anxiety, confusion, insomnia, mood disturbances, irritability, paranoia, delusions, hallucinations, increasing fatigue, exhaustion, and violent behavior [2]. Studies have also revealed that chronic abusers exhibit severe structural and functional changes in areas of the brain associated with emotion and memory, which may account for many of the emotional and cognitive problems observed in chronic methamphetamine abusers [5].

While the central nervous system stimulant effects may only last for a few hours after use, methamphetamine can also cause central nervous system depression when the stimulant affect has passed. This stage of methamphetamine abuse, found most often in long term chronic methamphetamine abusers, is known as withdrawal. Despite the fact

that the blood concentration declines to subtherapeutic levels, this "downside" period may be associated with significant anxiety, confusion, insomnia, mood disturbances, irritability, paranoia, delusions, hallucinations, increasing fatigue and exhaustion, and violent behavior. Therefore, low blood concentrations do not exclude the possibility of methamphetamine associated impairment [2]. Withdrawal can last for 7-10 days, and residual symptoms may persist for several months [6].

As noted above, blood methamphetamine concentrations – in and of themselves – cannot be utilized to infer effects (or impairment) due to the drug. This has been supported using animal models, where studies have also demonstrated that methamphetamine's effects are not reliably predicted from the blood (serum) concentrations [2].

The best guide to assess potential impairment, therefore, is a direct observation of the individual's behavior.

Cannabinoids

Delta-9-THC is the most psychoactive of the principal constituents of marijuana (or cannabis). Delta-9-THC is metabolized by the liver to a secondary active metabolite 11-hydroxy THC, which is then further metabolized to a pharmacologically inactive metabolite THC carboxylic acid [4].

When taken either orally or by smoking, marijuana results in sedation, euphoria, hallucinations, temporal distortion, panic reactions, and paranoia [4]. Delta-9-THC is a CNS depressant that may also cause confusion, dizziness, weakness, and vision difficulties [7]. In recent years, a number of experimental investigations have also shown it to cause decreased capacity – specifically a decrease in attention, increased reaction time, and a reduced ability to control direction. Individual variations are considerable, but there is an overall diminution in cognitive and motor functions [8].

Effects from smoking cannabis are felt within minutes and reach their peak in 10-30 minutes. Typically, cannabis smokers experience the effects for about two (2) hours. Most behavioral effects return to baseline levels within 3-5 hours after use [9]. For example, cannabis has been shown to impair performance for up to approximately three (3) hours [9]. The maximum psychological effects, however, may persist for 4-6 hours after administration [10].

Conclusions and Opinions

Based on my knowledge, education, training, and experience and the documents and information as described in this report, I conclude to a reasonable degree of scientific probability that:

1. Mr. Silva tested positive for Amphetamines (Methamphetamine) in the hospital toxicological analysis of his urine specimen.

- 2. Mr. Silva was found in the possession of drug paraphernalia two plastic baggies of a crystalline substance consistent with Methamphetamine, and consistent with the findings of the hospital testing of his urine.
- 3. Mr. Silva had a history of substance abuse and behavior consistent with stimulant (Methamphetamine) abuse. He had a history of and displayed erratic, aggressive, combative, and violent behavior. He also presented with slurring of his speech, making incoherent statements, mumbling, and rambling consistent with the recent use of Methamphetamine.
- 4. Mr. Silva also tested positive for Cannabinoids in the urine specimen collected in hospital following his admission.
- 5. Cannabinoids are also known to cause aberrant behavior because of the resultant euphoria, hallucinations, panic reactions, and paranoia.
- 6. Mr. Silva was under the influence and impaired by methamphetamine and possibly marijuana at the time of the incident.
- 7. Mr. Silva's observed behavior on 10/08/2022 including his reluctance to comply with the deputies' orders and their attempts of restraint, his active resistance to arrest, and his physical altercation with deputy Camara while handcuffed would be consistent with behavior generally associated with impairment due to recent drug use.

Yours truly,

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Iain M. McIntyre, Ph.D. Forensic Toxicologist

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11168 PASEO MONTANOSO • SAN DIEGO, CALIFORNIA • 92127
PHONE: (858)248-2342 WEB: http://iainmmcintyre.wix.com/toxicology